

stituted the most important modes of treatment. Dr. Bird alluded to the great prevalence of this class of affections in certain districts, at particular times: during the last six months a large proportion of women, in the district of the Finsbury Dispensary, who were confined, became the subject of puerperal neuralgia of the abdomen, in a more or less severe form. This he did not attribute to any epidemic influence, but rather to a moral effect, produced by the prevalence of child-bed fever in the district, as in almost all the cases admitted under Dr. Bird's care at the Dispensary, some depressing effect produced by such an impression was very easily made out.—*Lancet*, April 25, 1840.

29. *On the Morbid Consequences of Undue Lactation.* By SAMUEL ASHWELL, M.D.—Undue lactation, as a matter of medical inquiry, has not, I think, received a fair share of attention. Its injurious consequences are so frequently overlooked, or, being misunderstood, are attributed to other causes, that it will not, I trust, be regarded as unprofitable to comprise, in a few short and simple observations, the history and treatment of this affection, in its mild, severe, and complicated forms. The subject is practical, and therefore interesting; and, avoiding controversial views, no opinions will be advanced which are not supported by the cases which are constantly occurring.

The reader may be surprised to learn, that little has been written on undue lactation;—Dr. Marshall Hall, so far as I know, being the only author who has bestowed upon it more than a few incidental remarks. The essay of this able physician is a valuable contribution to our knowledge of the disease; although even Dr. Hall has scarcely done more than allude to the severer functional derangements, and the still more dangerous lesions of the brain and lungs.

I may, without hesitation, thus early observe, that *exhaustion*—generally attended by symptoms of reaction, but occasionally by depression, so extreme as almost to conceal any such effort—constitutes the prominent, the essential feature when lactation has become a disease. Anæmia, with irritability and universal pallor, are as apparent as in chlorosis: of course, in different degrees. In some instances there is distressing debility: in other, and less serious cases, there is only trifling anæmia, and proportionately slight pallor. Local congestion, also, as it is the result of an irregular distribution of the blood, may partially modify the anæmia and pallor, by producing, in certain organs, a temporary but morbid energy, and, by fulness of the capillaries, a less pallid and unhealthy aspect of the surface. Still, exhaustion is the permanent morbid state, associated with undue suckling.

Were the morbid consequences of this disease invariably functional and slight, even then, as occurring frequently, it would deserve attention: but, when it is remembered, that not only severe and complicated functional affections, but occasionally lesions even of an organic and incurable kind, may be fairly traced to its influence, when misunderstood or imperfectly treated, it certainly deserves especial attention. It may, I think, be proved,

First, That lactation to be morbid need not be long: evil consequences may ensue soon after its commencement; occasionally, within a few weeks; more frequently within a period protracted beyond nine months.

Secondly, That organic lesions may, although very rarely, result from undue suckling.

And, Thirdly, That weaning the child is generally indispensable to the cure—the remedy, without which all others will be inefficient.

It will be unnecessary to dwell at all largely on the history and symptoms of undue lactation: a few remarks will suffice to place the subject in a clear light. The period of suckling is happily, in the majority of women, one of health and enjoyment: still, the exceptions to this rule are by no means few; nor can it be expected, in an artificial and increasingly luxurious state of society, that the number shall be diminished. Thus, we do not find that robust and plethoric women often suffer from over nursing. If occasionally this is the case, the lactation has probably been protracted to fifteen, eighteen, or twenty months, or even to a longer term; and it certainly cannot then be a matter of surprise, if,

as the consequence of such imprudence, irritability, exhaustion, and various painful affections, shall occur. Women, originally of susceptible, weakly, and especially of strumous constitutions, whose minds have early and long been cultivated at the expense of their physical strength, who live in confined and unhealthy places, who before marriage have suffered from chlorosis, and who have since been weakened by hæmorrhagic and leucorrhœal discharges, or indeed by any undue secretion, are most frequently the sufferers from undue lactation. Such mothers can scarcely nurse at all; and others, somewhat stronger, having begun lactation favourably—by a poor and restricted diet; by nursing entirely, without the aid of feeding the child artificially; by broken rest, by anxiety; and by other circumstances too numerous to detail—quickly become exhausted, and present the whole series of symptoms constituting the malady of over-lactation.

Occasionally, in a few weeks—commonly in a few months—it will be apparent, from the imperfect nourishment of the infant, and from the debility, anæmia, and pallor of the mother, that the injurious consequences of over-nursing have commenced. Amongst the earlier symptoms of failure are, a heavy, dragging sensation in the back and loins, and directly between the scapulæ, when the child is at the breast; and a feeling of peculiar sinking and emptiness at the pit of the stomach, and over the whole abdomen, for hours afterwards. Inquire particularly, and you will discover, what is often anxiously concealed, that the milk is scanty in quantity, and with difficulty secreted; and that without long intervals, scarcely any fresh supply would be furnished. At this point, much might be done. If weaning entirely were practised, the symptoms would soon disappear; or if only partially adopted (by the child being judiciously fed, and the mother's rest at night secured, instead of being continually broken), lactation might be safely continued; as the appetite, digestive powers, and strength of the parent would be thereby improved. But the attempt to nurse is often persevered in, without these advantages; and the morbid results are soon aggravated. Together with an excitement or depression of mind, there is a proneness to hysteria; the pulse is quicker than natural, and easily compressed; the muscular system is weakened; the appetite is nearly destroyed, or it is at least fastidious and unhealthy; the bowels are either constipated and flatulent, or painfully griped, and slightly purged; there is headache, or giddiness, with impaired vision; pain between the shoulders, or in the sides, below the cartilages of the false ribs: now, but especially if the suckling be continued, there is swelling of the ankles, œdema of the face, and frequent palpitation. Such are the symptoms commonly attendant, even on a recent case; and it is only requisite that their intensity should be increased, and they will then correctly portray a severe and protracted example of undue lactation. Nor is it at all improbable that one or several of these symptoms shall exist in marked prominence, so as to excite the peculiar apprehension of the patient, and the almost exclusive attention of the practitioner. Impaired appetite is an especial attendant on the malady: nor is palpitation much less common. A chlorotic aspect, and slight emaciation, often give the first alarm; and dimness of vision, exciting fears of amaurosis, never fails to induce anxiety. The contrast of such a case, with one of favourable suckling, where health, cheerfulness, and vigour are enjoyed for many months, must fix the attention of the practitioner on the disease.

Let it be remembered, that the morbid process now sketched is entirely functional: at least, there is no symptom in the series which may not have a functional origin, and be confined within the limits of functional disease.

Before leaving this part of the subject, it will be proper to allude to some of the complications of morbid lactation; giving the priority to profuse menstruation, menorrhagia, and leucorrhœa. That the function of the uterus should be sooner or later disturbed by the continuance of a disease originating in an organ intimately connected with its own economy, might, from analogy, be easily inferred; more especially when the malady had deranged the whole system, on the health and activity of which the uterus is so greatly dependent. Thus, after the evils of over-lactation, already described, are fully realised, the uterine mucous lining, as well as its muscular tissue, partake of the general debility, and not only is

there profuse menstruation, but, from the relaxation of its capillaries, permits the escape of large quantities of blood: add to these losses, the almost constant drain of a leucorrhœal discharge, and it will then be understood, that over-lactation, thus complicated, may seriously and alarmingly exhaust a delicate and irritable female. How far such a condition may prepare the way for organic change of the womb, is not easily determined. I confess, I am disposed to think it favours abrasion, ulceration, and vivacious growths.

*Functional Amaurosis*, accompanied by congestion of the conjunctiva, is a frequent result of excessive lactation; and seldom fails, from its interference with the sight, at once to arouse the patient's fears lest vision should be entirely and permanently lost. These apprehensions may with truth be allayed; as doubtless, in the greater number of cases, prompt weaning will alone remove the affection: still, it may be necessary repeatedly to apply small blisters near the eye, and absolutely to forbid its employment. Improved diet, country and sea air, exercise out of doors, iron and quinine, are important remedial auxiliaries. Nor is it unimportant that quickly-recurring pregnancy should, if possible, be avoided. I have known several instances where, during a pregnancy immediately succeeding the exhaustion of over-nursing, the eye has been almost constantly in a state of "blood shot" or congestion, and the sight excessively imperfect. Months, and even years, sometimes elapse, where able treatment has done its best before distinct and strong vision is re-acquired. Specks, and slight ulcerations of the cornea, are occasionally connected with the exhaustion and irritability of nursing. In all these cases, provided there be no serious organic change, the sufferer may be encouraged certainly to expect the restoration of this most invaluable faculty.

Several examples of *jactitation* have fallen under my notice. In one poor woman, an out-patient of Guy's Hospital, the seizures always occurred after she had nursed for three or four months; and they were so violent, that she was compelled to lay down her baby when they occurred, lest she should let it fall. In another young and hysterical patient, who had borne children very quickly, there was, during lactation, an almost continual and slight twitching pretty universally throughout the extremities, but especially of the face. In both, weaning was always necessary before the sixth month, more on account of leucorrhœa and general irritability, than for the jactitation.

*Epilepsy* has been noticed by authors as the product of over-suckling; on the same ground as inanition, losses of blood, and deficiencies in its quantity and quality, are known pathologically to be productive of this malady; and I could adduce several instances where fits, difficult to be distinguished from decisive and unquestionable epilepsy, have occurred.

*Insanity*, more or less permanent, may originate from over-lactation; commencing by peculiarity of sentiment or temper, and plainly evinced by pertinacious adherence to an opinion once formed, however erroneous; and scarcely at all more strikingly displayed than in a determined opposition to any advice having for its end an entire or even a partial weaning. In this early stage, the further advance or the protracted continuance of the malady might probably be thus prevented: but, instead of weaning, larger quantities of porter or wine, with animal food, are most improperly resorted to. Still the desired supply is not obtained. The stomach has been already weakened; and as it is scarcely able to bear a diminished diet, fever and indigestion, or only apparent and temporary, not real strength, must be the consequence of this increased supply. Together with a continued sparing secretion of milk, the symptoms already described are aggravated. The insanity becomes positive and acute, the pulse quick and sharp, the skin parched, and the whole system deranged. The conduct of the patient is no longer doubtful: her actions are often violent; and, without personal restraint, serious, perhaps fatal injury might be inflicted on herself, and those around her. I agree, however, with Dr. Locock, that the aberration of undue suckling is rarely of this serious kind, excepting where generous diet and wine are injudiciously administered: more commonly it shows itself in weakness and absurd ideas, in whim and caprice. If weaning and

careful treatment be even now adopted, the symptoms often subside easily and quickly: while in other cases, where probably a disposition to insanity exists hereditarily, the disease is of longer duration, requiring seclusion and confinement for its cure. If it be asked whether permanent insanity is ever the result of the aberration of undue suckling, I confess that I am unable fully and satisfactorily to answer the question. In my own practice, such has never been its consequence; nor, so far as I know, have I discovered an example of the kind. The exhaustion of over-nursing induced the re-action and irritability on which the malady depends: and as this is gradually removed, by the formation of a larger quantity of better blood, the insanity passes away, and the individual slowly and anxiously recovers her lost reason. It may perhaps be said, by those who regard this malady less seriously, that the insanity would have occurred, independently of its intervention. The appended cases negative such an opinion. Additional confirmation is also furnished by the result of protracted lactation after another confinement. If, after such an event, more especially if the interval between the deliveries has been short, the suckling be again protracted, a similar aberration will probably ensue, indicating the propriety of greatly curtailing the time of lactation, if not of entirely giving it up.

It is not difficult to show many points of resemblance between this form of insanity and puerperal mania. The latter most commonly occurs in women of weakly, hysterical, and irritable habits; and, in the same class, over lactation is most frequently witnessed. In the greater number of examples of puerperal insanity, a modified antiphlogistic treatment only, comprising small local bleedings, cordial aperients, and particularly sedatives, with mild nourishment and tonics, is most successful; and the same may be said of the insanity from over lactation. Puerperal aberration is rarely permanent, if insanity be not hereditary, and if improper treatment has been avoided. The same observations are true of the insanity of over lactation. The former is disposed to recur in after confinements; and the latter will show itself afresh, after successive and injudiciously protracted nursings. There is, however, a marked difference in the frequency of the two diseases. The shock of parturition, the suddenness of the transition from pregnancy to the puerperal state, and the establishment of lactation itself, all of which involve considerable changes in the circulation and in the nervous system, sufficiently account for the greater prevalence of the one malady over the other.

The *pathology* of these functional results of undue suckling, is by no means intricate or unsatisfactory. An impaired and attenuated condition of the blood, and a consequently depressed state of the nervous system, especially of the organic system of nerves, is the clue by which all the symptoms may be unravelled.

I pass on now to notice what I believe to be a fact; viz. that very prolonged undue suckling may, *although rarely, induce organic change in the brain, lungs, and uterus.*

It has already been remarked, that *headache* is a frequent concomitant of the malady; nor can the practitioner be too strongly impressed with the hazard arising from its constancy. So long as it is general, not very severe and transient—so long as it does not recur periodically, with marked premonitory symptoms—it may be viewed as comparatively free from risk. But if it be dreaded, on account of the permanent uneasiness which it has already produced, or from its intensity and acuteness; if it seize on one part of the head, and remain fixed there; if its paroxysm be preceded by rigors, and if the pain never entirely subsides; more especially, if there be partial paralysis, mental peculiarity, or forgetfulness approaching to imbecility; or any other anomalous symptom indicative of deranged nervous action, for instance, an unusual affection of the eye, such as double or impaired vision; or of the auditory nerve, injuring the hearing, or rendering it excessively and painfully acute; or if there be impeded deglutition; then danger exists, and a softened, or otherwise structurally altered condition of the brain, may be feared. Still, if weaning has not been adopted, it ought yet to be urgently enjoined.

Again, *the lungs may become organically affected*; or, to express what is probably more strictly accordant with the fact, a tendency to phthisis, hitherto latent, may be developed; tubercles, till this period quiet and inactive, may soften, and all the symptoms of consumption may supervene. A slight and occasional cough need not excite apprehension; but if it be short, hacking, and habitual; if the breathing be quick, and disturbed on slight occasions; if there be fixed pain in the side, or over any part of the thoracic region; and if, added to these symptoms, there be progressive emaciation, even doubtful sputa, morning perspiration, and a constantly quick pulse, it may be confidently assumed, that if serious mischief has not already occurred, it is at hand. The stethoscope will scarcely fail to reveal some important structural lesion.

*The uterus may, I think, undergo organic change, as the result of undue suckling.*

The *pathology* of these structural lesions need not occupy us long. In reference to the lung, there can exist no doubt that the circumstances of undue lactation are favourable to the development of phthisis; and I believe, that if the supply of milk in women of this class did not generally very soon cease, many more would fall victims to protracted nursing.

As to the brain and uterus, we are so much more accustomed to see their organic changes following a state of hyperæmia and repeated irritation and inflammation, that we are indisposed to recognise such consequences from a state where exhaustion is the prominent feature; and yet this is physiologically correct. It is universally admitted, that the blood nourishes the solid structures of the body; and without its healthful influence their integrity cannot be maintained. If then, by an undue and protracted lactal secretion, the quality as well as the quantity of the blood is impaired, it seems an inevitable result, that a morbid modification of the firm and solid organs of the body must ensue. Just in proportion as the fibrin and albumen of the blood are drawn off, must the structures alluded to suffer in their organization. And, as induration results from inflammation, where there is generally, at least very often, an undue proportion of fibrin, so may softening of the brain and uterus, without malignancy, follow in the course of undue suckling, independently of any inflammatory action. Andral supports this opinion. He says: "Where shall we find the symptoms of encephalitis, carditis, hepatitis, nephritis, metritis, &c., in various cases of softening of the brain (especially of its white central portion), and of the heart, liver, kidneys, uterus, &c.; every one of which may pass into such a state of softening, that its tissue may be torn or broken down into a pulaceous mass, without having given rise to a single symptom which could lead to a suspicion of the existence of inflammation."

*Treatment.*—The indications in the merely functional affections are not difficult to meet. Where the symptoms of exhaustion are slight, a better diet, a careful regulation of the bowels, a tonic treatment, and, above all, diminished suckling, will often avail. Nor is it necessary to urge very strongly, because their propriety is evident, that the child should be fed two or three times within the twenty-four hours, and that unbroken sleep during the night should be secured to the mother. But let it be remembered, that this will not always avail. A continuance of the debility, or the aggravated prevalence of one or more of the symptoms already enumerated, will plainly indicate the necessity of entire weaning. If the child be purged, or become gradually emaciated, it will corroborate the importance of the step.

Where organic disease is threatened, especial attention must be paid to the organ in which it seems likely to occur. Cupping, or leeches, may be required; and counter irritation, by blisters, setons, or issues, may be expedient: beyond these general directions, the practitioner will proceed according to the exigencies of the case, never omitting the weaning of the child. The convalescence of such patients is generally protracted and difficult, years sometimes elapsing prior to recovery. Nor can it be too forcibly recommended, that suckling should be abandoned, if a fresh pregnancy succeed very quickly. The symptoms are often rendered worse by gestation, and invariably by a renewed lactation. Iron, cha-

lybeate waters, country and sea air, travelling, and exercise, are most important auxiliaries.—It would be easy to enlarge the details of this portion of the essay, but I cannot think it requisite to do so. Every case will demand a curative or preventive treatment; and it will be fortunate for the patient if the approach of organic symptoms be described sufficiently early to obviate their full establishment.—*Guy's Hospital Reports*, April, 1840.

30. *Acetate of Lead in Bronchitis*.—Dr. William Henderson in a paper in the *London Medical Gazette* (May 8th, 1840) states that after a careful investigation of the powers of the acetate of lead, continued for several years, and based on an ample compass both of personal observation and the reported experience of several practitioners to whom he has recommended the use of it, he feels warranted in stating his conviction that it is a remedy by far the most worthy of reliance in bronchitis attended with profuse secretion. The useful agency of this preparation, he says, “is not confined to the bronchitis of measles and whooping-cough, but is equally observable in the simple bronchitis, and in that which so often occurs as a complication of continued fever. In whatever class of cases I have prescribed it, its administration has been limited to that period of the bronchitis in which the evidences of abundant secretion were apparent; and those evidences have formed the only guides which I have found it requisite to follow in the first exhibition of the remedy, and in regulating the bulk and frequency of the doses. The stage or duration of the disease does not require to be regarded in prescribing the acetate; and though it exerts a signal and most salutary influence on the secretion of chronic mucous catarrhs, it has always appeared to me that its chief value consists in the rapidity of its operation in such acute cases as are characterised by copious secretion, whether of the muco-purulent appearance or not, whereby the respiration is impeded, and suffocation is threatened.

“In acute bronchitis, diverse effects have been observed to succeed the use of the lead. In some instances a very speedy and entire removal of the rattles has ensued, without the pulse having been lessened in frequency, or the respiratory acts materially altered from their previous condition. In such I have been accustomed to omit the lead, and to recur to the antimony, ipecacuan, and calomel, or to whatever remedy had been previously used. In a second class of cases, the rattles have merely undergone a considerable diminution, while the other symptoms have continued nearly or altogether as before. In those I have found it of great advantage to alternate, with the exhibition of the acetate of lead, either the antimony or calomel and ipecacuan. In a third class no material change of any kind has followed the use of the lead for several days. The cases of this class, for the most part, consisted of whooping cough, with intense general bronchitis; and in the treatment of them, the acetate has been given in much larger quantity, and continued longer than in the others. I have repeatedly ascertained, in cases of this kind, that though the number of rattles, and the apparent amount of the secretion, seemed but little reduced from the state which they had presented on the lead being first administered, a marked change for the worse has followed the omission of it. In this class of cases, the doses of lead have been usually alternated with those of some common remedy; yet the latter have been frequently omitted, unless some indication of pneumonia existed, without apparent disadvantage. In a fourth class, composed mostly of cases, in which the secretion appeared, from its extreme abundance, to be the principal cause of the more harassing symptoms—to wit, the hurried acts of respiration, dyspnoea, and consequent restlessness, &c.—the decrease in the number of the rattles, more especially the larger mucous rattles, which has commonly soon followed the administration of the lead, has been very generally accompanied by a commensurate decrease in the other important symptoms. In not a few instances of feeble children, labouring under acute general bronchitis with copious secretion, have the effects of the acetate been observed, by myself and others, so promptly and decidedly manifested as to excite no little surprise, and to alter the prognosis speedily, from a very gloomy to a very cheerful aspect.

“The dose in which this medicine may be given must vary with the exigencies